

## CLAIMS

What is claimed is:

- 1 1. A system for providing a portal to information stored in one or more information  
2 repositories, comprising:  
3 a computer network;  
4 one or more information repositories, each information repository including a  
5 communications component connecting the information repository to the computer network;  
6 a metadata server, the metadata server including a communications component  
7 connecting the metadata server to the computer network, the metadata server storing  
8 metadata information about data stored in the one or more information repositories; and  
9 a portal server, the portal server having a communications component connecting the  
10 portal server to the computer network, the portal server receiving requests and processing the  
11 requests using metadata information stored on the metadata server.
- 1 2. The system of claim 1, wherein the computer network is the Internet.
- 1 3. The system of claim 1, wherein the metadata server stores the metadata information  
2 encoded in the eXtensible Markup Language (XML).
- 1 4. The system of claim 1, wherein the metadata server stores the metadata information  
2 encoded in the Resource Description Framework (RDF) format.

- 1 5. The system of claim 1, wherein the requests that the portal server receives are one or  
2 more from the group consisting of: a search request and an information retrieval request.
- 1 6. The system of claim 1, wherein the metadata server and the portal server are run on a  
2 single computing device.
- 1 7. The system of claim 6, wherein the metadata server and the portal server use the same  
2 communications component to connect to the computer network.
- 1 8. The system of claim 1, wherein the metadata information stored on the metadata  
2 server includes classmark information.
- 1 9. The system of claim 8, wherein the classmark information is automatically  
2 determined from an index and a class definition.
- 1 10. A system for searching and retrieving information on a network, comprising:  
2 a computer network; and  
3 a user workstation, the user workstation including a communications component  
4 connecting the user workstation to the computer network, the user workstation receiving a  
5 request;

6 the user workstation sending the request to a portal server, the portal server using  
7 metadata information about data stored in one or more information repositories to process the  
8 request, returning resulting information to the user workstation.

1 11. The system of claim 10, wherein the metadata information is encoded in the  
2 eXtensible Markup Language (XML).

1 12. The system of claim 10, wherein the metadata information is encoded in the Resource  
2 Description Framework (RDF) format.

1 13. The system of claim 10, wherein the request received by the user workstation is one  
2 or more from the group consisting of: a search request and an information retrieval request.

1 14. A system for cataloguing information stored in an information repository, the system  
2 comprising:

3 a keyword index of data stored in an information repository;

4 one or more domain class definitions; and

5 a computing device, the computing device cataloguing documents stored in the  
6 information repository using the keyword index and the one or more class definitions.

1 15. The system of claim 14, wherein the keyword index is built by a spider.

1 16. The system of claim 14, wherein each of the one or more domain class definitions  
2 includes one or more classes, each of the one or more classes including keywords  
3 representative of that class.

1 17. The system of claim 16, wherein each of the keywords representative of a class are  
2 weighted.

1 18. A computer-readable medium comprising data stored in a data structure for describing  
2 data stored in an information repository, the data structure including:  
3 a resource locator attribute identifying a document stored in an information  
4 repository; and  
5 a classmark attribute identifying a classification of the document, the classification  
6 automatically determined using a keyword index and a classification definition.

1 19. The computer-readable medium of claim 18, wherein the data structure further  
2 comprises:  
3 an author attribute identifying the author of the document; and  
4 a title attribute specifying a title for the document.

1 20. The computer-readable medium of claim 18, wherein the data structure further  
2 comprises an abstract attribute specifying an abstract of the document.

1 21. The computer-readable medium of claim 18, wherein the data structure further  
2 comprises a keyword attribute, the keyword attribute identifying zero or more keywords for  
3 the document.

1 22. A method for cataloguing data stored in an information repository, comprising:  
2 receiving a keyword index of data stored in an information repository;  
3 receiving a classification definition, the classification definition including a plurality  
4 of classes;  
5 determining the classification of data stored in the information repository using the  
6 keyword index and the classification definition; and  
7 storing the determined classification.

1 23. The method of claim 22, wherein receiving a keyword index is built by a spider.

1 24. The method of claim 22, wherein the determined classification is stored in the  
2 eXtensible Markup Language (XML) format.

1 25. The method of claim 22, wherein the determined classification is stored in the  
2 Resource Description Framework (RDF) format.

1 26. A method for providing access to one or more information repositories, the method  
2 comprising:  
3 receiving a request on a portal server; and  
4 using metadata about data stored in one or more information repositories to process  
5 the request.

1 27. The method of claim 26, wherein the request is one or more from the group consisting  
2 of: a search request and an information retrieval request.

1 28. The method of claim 26, wherein the metadata is encoded in the eXtensible Markup  
2 Language (XML).

1 29. The method of claim 26, wherein the metadata is encoded in the Resource Description  
2 Framework (RDF) format.

1 30. The method of claim 26, wherein the metadata is stored on the portal server.

1 31. The method of claim 26, wherein the metadata is stored on a metadata server.

1 32. The method of claim 26, wherein the metadata includes a classmark attribute, the  
2 classmark attribute being automatically generated from a keyword index and a class  
3 definition.